

## CLAIMS

[1] A semiconductor integrated circuit, to which a power supply voltage is supplied via electromagnetic waves received by an antenna coil, and which exchanges data via the antenna coil, the semiconductor integrated circuit comprising:

5 a memory circuit storing data;  
a pair of terminals to which the antenna coil is connected;  
a modulating-transmitting circuit for transmitting data via the antenna coil by varying a load between the terminals according to data to be transmitted;

a transmission control circuit for outputting data stored in the memory circuit  
10 to the modulating-transmitting circuit; and

a reset signal generating circuit for outputting a reset signal for resetting the transmission control circuit to the transmission control circuit when the power supply voltage decreases below a predetermined threshold value, wherein:

the transmission control circuit is configured to output a transmission status  
15 signal, which indicates that data is being transmitted; and

the reset signal generating circuit is configured so that the threshold value is lower during a period in which the transmission status signal is being output than during a period in which the transmission status signal is not being output.

[2] The semiconductor integrated circuit of claim 1, wherein the reset signal  
20 generating circuit includes a voltage-dividing resistor for dividing the power supply voltage and is configured so as to output the reset signal when a voltage obtained by the voltage division by the voltage-dividing resistor is lower than a predetermined reference voltage.

[3] The semiconductor integrated circuit of claim 2, wherein the reset signal  
25 generating circuit is configured to change a voltage division ratio so that the voltage obtained by the voltage division is higher during a period in which the transmission status

signal is being output than during a period in which the transmission status signal is not being output.

[4] The semiconductor integrated circuit of claim 3, wherein:

the voltage-dividing resistor is a series of resistors including three or more resistors; and

the reset signal generating circuit is configured to change the voltage division ratio by changing the number of transistors of the series of resistors for dividing the power supply voltage.

[5] The semiconductor integrated circuit of any one of claims 1 to 4, wherein the transmission control circuit is configured to output the transmission status signal while simultaneously outputting data stored in the memory circuit to the modulating-transmitting circuit.

[6] The semiconductor integrated circuit of claim 1, wherein the transmission control circuit includes a buffer for holding data stored in the memory circuit and is configured to output data held in the buffer to the modulating-transmitting circuit.

[7] The semiconductor integrated circuit of claim 1, wherein the transmission control circuit is configured to stop outputting the transmission status signal after an amount of time greater than or equal to an amount of time required for outputting data to the modulating-transmitting circuit has elapsed since completion of the data output to the modulating-transmitting circuit.

[8] The semiconductor integrated circuit of claim 1, further comprising a high-voltage side reset signal generating circuit for outputting, to the transmission control circuit, a reset signal for resetting the transmission control circuit when the power supply voltage exceeds a predetermined threshold value,

wherein the high-voltage side reset signal generating circuit is configured so that the threshold value is lower during a period in which the transmission status signal is

being output than during a period in which the transmission status signal is not being output.

[9] The semiconductor integrated circuit of claim 8, wherein the high-voltage side reset signal generating circuit includes a voltage-dividing resistor for dividing the power supply voltage and is configured to output the reset signal when a voltage obtained by the voltage division by the voltage-dividing resistor is higher than a predetermined reference voltage.

[10] The semiconductor integrated circuit of claim 9, wherein the high-voltage side reset signal generating circuit is configured to change a voltage division ratio so that the voltage obtained by the voltage division during a period in which the transmission status signal is being output is higher than that during a period in which the transmission status signal is not being output.

[11] The semiconductor integrated circuit of claim 10, wherein:

the voltage-dividing resistor is a series of resistors including three or more resistors; and

the high-voltage side reset signal generating circuit is configured to change the voltage division ratio by changing the number of transistors of the series of resistors for dividing the power supply voltage.

[12] A contactless type information system, comprising:

a contactless type information medium including the semiconductor integrated circuit of claim 1 and an antenna coil connected to the semiconductor integrated circuit for transmitting/receiving electromagnetic waves; and

a data transmitting/receiving device for supplying a power supply voltage to, and exchanging data with, the contactless type information medium via electromagnetic waves.